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[1]

# EU-TYPE EXAMINATION CERTIFICATE



[2]

## Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3]

EU-Type Examination Certificate Number: **UL 21 ATEX 2656X Rev. 0**

[4]

Product: **Gas Detector**

[5]

Manufacturer: **Prosense Teknoloji San. Ltd. Sti.**

[6]

Address: **Cumhuriyet Mah, Mermer Sk. No:16, KARTAL - Istanbul 34876 Turkey**

[7]

This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8]

UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. **DK/ULD/ExTR21.0035/00.**

[9]

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0:2018**

**EN 60079-1: 2014**

**EN 60079-31:2014**

[10]

If the sign "X" is placed after the certificate number, it indicates that the product is subject to special conditions for safe use specified in the schedule to this certificate.

[11]

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by the certificate.

[12]

The marking of the product shall include the following:



**II 2 G Ex db IIC T6 Gb**



**II 2 D Ex tb IIIC T85°C Db**

### Certification Manager

Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

**Date of issue: 2022-04-27**

### Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark  
Tel. +45 44 85 65 65, [info.dk@ul.com](mailto:info.dk@ul.com), [www.ul.com](http://www.ul.com)



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# Schedule

## EU-TYPE EXAMINATION CERTIFICATE No.

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Description of Product

Prosense PQ series Gas and Vapor Detection Equipment comprise an Aluminium or Stainless-steel enclosure provided with up to 3 no. threaded entries for field wiring and one for the threaded device containing the detector module. The threaded cover allows access to the wiring terminals and PCB's. The PQ Gas Detector is intended to indicate presence of flammable and toxic gases in air or oxygen by atmospheric aspiration only. PQN provides RS-485 output and includes relay connection for external annunciation or control; as well as these features, the PQD incorporates a sight glass allowing review of the integral display. Data log function may be provided, as well as battery cell back-up.

Nomenclature:

| Gas detector                       | Display                     | SIL  | Gas type   | Sensing head    | Sensor type                | Cable entry  | Certification          |
|------------------------------------|-----------------------------|--|--|-----------------|----------------------------|--|------------------------|
| <b>PQ</b> = PQ Series gas detector |                             |  |  |                 |                            |  |                        |
|                                    | <b>D-</b> = With display    |  |  |                 |                            |  |                        |
|                                    | <b>N-</b> = Without display |  |  |                 |                            |  |                        |
|                                    |                             | <b>S-</b> = SIL version electronics (SIL not part of this certification) |  |                 |                            |  |                        |
|                                    |                             |  | <b>XX</b> - two digits (Gas type – not part of this certification) |                 |                            |  |                        |
|                                    |                             |  |  | <b>1</b> = SH10 |                            |  |                        |
|                                    |                             |  |  | <b>2</b> = SH20 |                            |  |                        |
|                                    |                             |  |  | <b>3</b> = SH30 |                            |  |                        |
|                                    |                             |  |  |                 | <b>1</b> = Semiconductor   |  |                        |
|                                    |                             |  |  |                 | <b>2</b> = Catalytic       |  |                        |
|                                    |                             |  |  |                 | <b>3</b> = Infrared        |  |                        |
|                                    |                             |  |  |                 | <b>4</b> = Electrochemical |  |                        |
|                                    |                             |  |  |                 | <b>5</b> = Pellistor       |  |                        |
|                                    |                             |  |  |                 | <b>6</b> = PID             |  |                        |
|                                    |                             |  |  |                 | <b>7</b> = MPS             |  |                        |
|                                    |                             |  |  |                 |                            | <b>T1</b> = 1/2" NPT, 1/2" NPT, 1/2" NPT, 3/4" NPT |                        |
|                                    |                             |  |  |                 |                            | <b>T2</b> = 3/4" NPT, 3/4" NPT, 3/4" NPT, 3/4" NPT |                        |
|                                    |                             |  |  |                 |                            | <b>T3</b> = M20, M20, M20, 3/4" NPT                |                        |
|                                    |                             |  |  |                 |                            |  | = ATEX, UKEX and IECEx |

Performance testing

The measuring function of the product for explosion protection, according to Annex II clause 1.5.5, 1.5.6 and 1.5.7 of the Directive 2014/34/EU is not covered in this certificate.

Temperature range

The ambient temperature range is  $-40^{\circ}\text{C} \leq T_a \leq +70^{\circ}\text{C}$ .

Routine tests

Routine tests according to EN 60079-1 cl. 16 are not required, as the enclosures have been successfully tested at four times the reference pressure.

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [ 8 ] on page 1 of this EU-Type Examination Certificate.

[17]

Specific conditions of use:

- Flamepaths must not be repaired
- When the painted enclosure is intended for use in Group III applications, the end user must adhere to the manufacturer's instructions to minimise risk of electrostatic discharge.
- Installed orientation of the equipment must be in accordance with the manufacturer's instructions.



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## Schedule

[14]

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### Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

### Additional information

The PQ series Gas and Vapor Detection Equipment has in addition passed the tests for Ingress Protection to IP 6X in accordance with EN60529:1991+A1:2000+A2:2013.

**Prosense**

The trademark will be used as the company identifier on the marking label.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.

